

OPTICAL TRANSMITTER FOR INCREASED EFFECTIVE MODAL BANDWIDTH TRANSMISSION

Abstract

An optical transmitter for an optical fiber transmission system is described. The optical transmitter includes an optical source that generates an optical signal having a wavelength at an output. An optical intensity modulator modulates the optical signal with an electrical modulation signal to generate a modulated optical signal at an output. At least one parameter of the optical intensity modulator is chosen to suppress at least one of phase and sideband information in the modulated optical signal. An optical fiber is coupled to the output of the optical intensity modulator. The suppression of the at least one of the phase and the sideband information in the modulated optical signal increases an effective modal bandwidth of the optical fiber.